Appl. No. 10/521,900

Preliminary Amdt. Date: October 4, 2005

## Amendments to the Claims

This listing of claims will replace all prior version and listings of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) A process for preparing a polymeric hydroperoxide which in a redox reaction forms free-radical polymer but no low molecular weigh free radical, characterized in that a synthetic polymer which comprises comprising at least one tertiary hydroxyl group or olefin function and has no further groups which are reactive toward the peroxidation reagent used is introduced into a mixture of and is reacted with concentrated hydrogen peroxido and a concentrated mineral acid.
- 2. (Original) The process as claimed in claim 1, characterized in that H<sub>2</sub>O<sub>2</sub> having a concentration of from 50 to 70% is used.
- 3. (Currently Amended) The process as claimed in claim 1-or-2, characterized in that sulfuric acid having a concentration of from 50 to 80% is used as concentrated mineral acid.
- (Currently Amended) The process as claimed in <u>claim 1 any of the preceding claims</u>, characterized in that the polymer is used as a solution in an organic solvent.
- 5. (Currently Amended) The process as claimed in <u>claim lany of the preceding claims</u>, characterized in that a polysiloxane polyol, polyether polyol or polyester polyol is used as starting material.
- 6. (Currently Amended) The process as claimed in <u>claim 1 any of the preceding claims</u>, characterized in that the reaction is carried out at a temperature of from +10 to +60°C.

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- 1. A process for proparing a polymeric hydroperoxide which in a redex reaction forms freeradical polymer but no low molecular weight free radical, characterized in that a synthetic
  polymer which comprises at least one tertiary hydroxyl group or elefin function and has
  no further groups which are reactive toward the peroxidation reagent used is introduced
  into a mixture of concentrated hydrogen peroxide and a concentrated mineral acid.
- 7. (Currently Amended) The process as claimed in <u>claim lany of the preceding claims</u>, characterized in that a polysiloxane polyol dissolved in a lower alcohol is used.
- 8. (Original) A process for preparing copolymers by redox polymerization using a peroxidic polymerization initiator, characterized in that, to avoid formation of homopolymers, a hydroperoxide prepared by adding a synthetic polymer which comprises at least one tertiary hydroxyl group or olefin function and has no further groups which are reactive toward the peroxidation reagent used to a mixture of concentrated hydrogen peroxide and a concentrated mineral acid is used as redox polymerization initiator and the copolymerization is carried out at a temperature below 90°C.
- 9. (Original) The process as claimed in claim 8, characterized in that the polymer is used as a solution in an organic solvent.
- 10. (Currently Amended) The process as claimed in claim 8-or 9, characterized in that a polyether polyol, polyester polyol or polysiloxane polyol is used as starting material.